GARDINER

System Service Solutions

HVAC Maintenance Agreement

Ohio State Term Schedule MMA PROPOSAL
INDEX NO: MMA632 - SCHEDULE NUMBER: MMA7553

Level Three – Select Maintenance Program

CONTRACT PRESENTED TO:

Mr. Joseph J. Beno PE
Director of Public Works
City of Lakewood
12650 Detroit Avenue
Lakewood, Ohio 44107

PROJECT AND/OR LOCATION:

City of Lakewood
Lakewood City Hall Facility & Service Garage – 12650 Detroit Avenue
Lakewood Fire Station #1 – 14601 Madison Avenue
Lakewood Fire Station #2 – 18124 Detroit Avenue
Lakewood Fire Station #3 – 12567 Clifton Blvd.
Wastewater Treatment Plant – 1699 Valley Parkway
Lakewood Animal Shelter – 1299 Metro Park Drive
Lakewood Park Women's Club Pavilion – 14532 Lake Avenue
Lakewood Municipal Utilities Garage (MUG) – 1699 Metro Park Drive
Lakewood Division of Aging – 16024 Madison Avenue
Lakewood City Hall Annex – 12805 Detroit Avenue

PRESENTED BY:

Michael T. Bailey
Account Manager

AGREEMENT NO:

C001661 Renewal | April 1, 2018

SERVICE AGREEMENT PRICING AND ACCEPTANCE

PROJECT AND LOCATION: **City of Lakewood**

- ***Lakewood City Hall Facility & Service Garage – 12650 Detroit Avenue***
- ***Lakewood Fire Station #1 – 14601 Madison Avenue***
- ***Lakewood Fire Station #2 – 18124 Detroit Avenue***
- ***Lakewood Fire Station #3 – 12567 Clifton Blvd.***
- ***Wastewater Treatment Plant – 1699 Valley Parkway***
- ***Lakewood Animal Shelter – 1299 Metro Park Drive***
- ***Lakewood Park Women's Club Pavilion – 14532 Lake Avenue***
- ***Lakewood Municipal Utilities Garage (MUG) – 1699 Metro Park Drive***
- ***Lakewood Division of Aging – 16024 Madison Avenue***
- ***Lakewood City Hall Annex – 12805 Detroit Avenue***

GARDINER, agrees to furnish services in accordance with the "General Terms and Conditions" and attached "Schedules". This AGREEMENT shall become valid only upon acceptance by **CUSTOMER** and approved by GARDINER.

EQUIPMENT TO BE SERVICED – PLEASE SEE PAGE 5

This agreement price is **$75,705.98** per year, **payable annually** for the period from **April 1, 2018, through March 31, 2019** and shall remain in effect from year to year unless terminated by either party at the end of the anniversary date by giving at least thirty (30) days written notice.

NAME	ADDRESS	ANNUAL AMT
Lakewood City Hall	12650 Detroit Ave	19,324.00
Lakewood Service Garage (Behind City Hall)	12650 Detroit Ave	3,485.00
Lakewood Fire Station #1	14601 Madison Ave	11,051.00
Lakewood Fire Station #2	18124 Detroit Ave	4,540.00
Lakewood Fire Station #3	12567 Clifton Blvd	2,194.00
Lakewood WWTP	1699 Valley Parkway	11,792.00
Lakewood Animal Shelter	1299 Metro Park Drive	2,307.00
Lakewood Park Women's Club Pavilion	14532 Lake Ave.	6,275.00
Lakewood Municipal Utilities Garage MUG	1699 Metro Park Drive	4,041.00
Lakewood Division of Aging	16024 Madison Avenue	9,966.00
Lakewood City Annex	12805 Detroit Avenue	2,276.00
TOTAL		**77,251.00**
Less 2% Discount for Annual Payment		<1,545.02>
DISCOUNTED TOTAL		**75,705.98**

**** For York Chiller YRCT Serial #SMTM-128940 – CITY HALL**
The full coverage terms for Level 3 will not apply. Instead, any additional repairs, replacements, or after hours emergency service calls will be limited to $10,000.00 per occurrence. For repairs or replacements that total more than $10,000.00, the excess amount will be billed at best prevailing rate.

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SERVICE AGREEMENT PRICING AND ACCEPTANCE

Note: This price includes provisions for safety under standard industry & Gardiner Trane safety guidelines. Any special additional safety training, equipment, or processes required by your organization could affect the project scope and/or hours and may result in a price adjustment. If you have any specific safety practices or requirements, please alert your sales representative immediately so we ensure that our proposal fully meets your requirements.

SUBMITTED BY: Michael T. Bailey, Account Manager — Date: March 1, 2018

CUSTOMER ACCEPTANCE:

Signature: _____

Title: Director of Finance

Acceptance Date: 3/19/18

Purchase Order No: _____

SERVICE COMPANY APPROVAL:

Signature: _____

Michael T. Bailey
Account Manager

GARDINER COPY

Approved As To Legal Form:
Director of Law, City of Lakewood

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GENERAL TERMS AND CONDITIONS

I. PRICE ADJUSTMENT

This agreement will automatically renew each year. A price adjustment may be required based on future prevailing conditions (labor and material index). The adjustment to the agreement price will be clearly indicated on the first invoice of the next term of the agreement.

II. PAYMENT

Terms of this agreement are net payment upon receipt of invoice. GARDINER reserves the right to discontinue its service anytime payments have not been made as agreed. Taxes, if applicable, will be included in billing. An itemized billing statement reflecting the application of Ohio sales tax shall be made available upon request. CFC Tax has been passed for most refrigerants per the 1990 Budget Reconciliation Bill (H.R. 3299).

III. WARRANTY: GARDINER guarantees service work and all materials of GARDINER's manufacture against defects in workmanship for 90 days from date of completion of the work and will repair or replace such products or components as GARDINER finds defective. This warranty does not include cost of handling, shipping, or transportation involved in supplying replacements for defective components. This warranty does not include the replacement of refrigerant lost from the system. On machinery and materials furnished by GARDINER, but manufactured by others, the only warranty provided is that of the manufacturer. **THE WARRANTY AND LIABILITY SET FORTH IN THE PRECEDING PARAGRAPHS ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL GSC BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES.**

Approved As To Legal Form:
Director of Law, City of Lakewood

IV. LIMITATION OF LIABILITY: All claims, causes of action or legal proceedings against GARDINER arising from GARDINER's performance under this contract must be commenced by CUSTOMER within the express warranty period specified under Paragraph III hereof. Failure to commence any such claim, cause of action or legal proceeding within such claim, cause of action or legal proceeding within such period shall constitute a voluntary and knowing waiver thereof by CUSTOMER. **IN NO EVENT SHALL GARDINER'S LIABILITY FOR DIRECT OR COMPENSATORY DAMAGES EXCEED THE PAYMENTS RECEIVED BY GARDINER FROM CUSTOMER UNDER THIS CONTRACT, NOR SHALL GARDINER BE LIABLE FOR ANY SPECIAL INCIDENTAL, OR CONSEQUENTIAL, OR PUNITIVE DAMAGES. THESE LIMITATIONS ON DAMAGES SHALL APPLY UNDER ALL THEORIES OF LIABILITY OR CAUSES OF ACTION INCLUDING BUT NOT LIMITED TO CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY. GARDINER DISCLAIMS ANY LIABILITY FOR DAMAGES OF ANY KIND ARISING FROM MOLD, FUNGUS, BACTERIA, MICROBIAL GROWTH, OR ANY OTHER CONTAMINATES.**

V. INDEMNITY: GARDINER and customer shall mutually, in proportion to their respective degree of fault, indemnify, defend and hold each other Customer harmless from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees, resulting from death or bodily injury or damage to real or tangible personal property, to the extent caused by the negligence or misconduct of the indemnifying party, and /or its respective employees or agents. With respect to any claims based on facts or conditions that occurred prior to expiration or termination of this agreement, the duty to indemnify will continue in full force and effect notwithstanding expiration or early termination.

SLS

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GENERAL TERMS AND CONDITIONS

VI. NO-HIRE; NO-SOLICITATION: CUSTOMER hereby covenants and agrees that, without the prior written consent of the Company, he/it will not, directly or indirectly (including, without limitation, through any affiliate or related party), for a period of two (2) years after the date hereof solicit the employment of, offer employment to or hire, any employee of the Company, or any individual whose employment with the Company ended less than one hundred eighty (180) days prior to such solicitation or offer. CUSTOMER acknowledges that in the event of a violation of the covenants contained in this Section, the Company's damages will be difficult to ascertain and the Company's remedies at law will be inadequate. Accordingly, the CUSTOMER agrees that, in addition to such remedies as the Company may have at law, the Company shall be entitled to specific performance of such covenants and to an injunction to prevent any continuing violation thereof.

VII. DISPUTES AND CHOICE OF LAWS: This contract shall be deemed to have been entered into and shall be governed by the laws of the State of Ohio. All claims, disputes, and controversies arising out of or relating to this contract, shall be submitted to mediation, pursuant to the Commercial Dispute Resolution Procedures ("CDRP") of the American Arbitration Association. The mediation shall take place in Cleveland, Ohio within thirty (30) days of the date the dispute arises. If mediation is unsuccessful, the dispute shall proceed to binding arbitration, pursuant to the CDRP, in Cleveland, Ohio, no later than sixty (60) days after the mediation is concluded. Any judgment upon the arbitration award may be confirmed in any court having jurisdiction thereof. The parties agree that any party to the arbitration shall be entitled to discovery from the other party as provided by the Ohio Rules of Civil Procedure. Any such discovery shall be completed within four (4) months from the date the Demand for Arbitration is filed with the American Arbitration Association. Unless otherwise agreed, the arbitration shall be completed no later than six (6) months after the arbitration commenced.

VIII. CUSTOMER OBLIGATIONS: The CUSTOMER shall:

- Operate the equipment in accordance with manufacturer's recommended instructions.
- Promptly notify GARDINER of any unusual operating conditions.
- Provide access to the equipment including removal, replacement, or refinishing of the building structure if necessary.
- Pay for any services and materials not specifically included in this agreement. Additional charges shall be made upon CUSTOMER's authorization at prevailing rates.
- Disposal of old oil and refrigerant shall be the CUSTOMER's responsibility if it becomes classified as hazardous.

Included but not limited to:

Excessive make-up in a closed loop, maximum product allowance 15 Gallons of LG-62
Additional 5-Gallon containers of LG-62 billed at $185.00 each

Water Treatment - Customer shall:

- Inform Gardiner of system alarms
- Inform Gardiner of utility failures
- Inform Gardiner of Microbiologically induced corrosion

Water Treatment – Customer shall not:

- Tamper with controls without the knowledge of Gardiner
- Bypass the water softener
- Increase system size, or operating time
- Close or bypass bleed-off, or blow-down lines
- Delay technician for greater than 15 minutes to enter facility

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GENERAL TERMS AND CONDITIONS

IX. **GARDINER OBLIGATIONS:** It shall be the responsibility of GARDINER to inform the CUSTOMER of any adverse conditions beyond the scope of the preventive maintenance agreement and make recommendations to correct them.

X. **SUPPLEMENTAL CONDITIONS:** 1) **City of Lakewood** shall be considered a priority customer; GARDINER will respond to a service call within four (4) hours. 2) Any services or material supplied outside the context of this contract will be billed at best prevailing rate.

XI. **ENTIRE AGREEMENT:** These terms and conditions constitute the entire agreement between GARDINER and CUSTOMER. If there is a conflict with other terms and conditions, these terms and conditions shall control. No course of dealing or performance, or prior, concurrent or subsequent understanding, agreements, or representations become part of this contract unless expressly agreed to in writing by an authorized representative of GARDINER.

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SUPPLEMENTAL TERMS AND CONDITIONS

(For "All Inclusive" or "Select Maintenance" contract on existing equipment)

The following Terms and conditions are in addition to the Terms and Conditions of the State of Ohio MMA Agreement #MMA7553. If there are any conflicting Terms or Conditions, The State of Ohio MMA Agreement Terms prevail.

1) The equipment covered under this contract is the total responsibility of the contractor. This includes labor (scheduled and emergency) and all parts.

2) Excluded from the contract are all non-maintainable parts:
Items not normally mechanically maintainable such as heat exchangers, ductwork, casings, cabinets, fixtures, structural supports, grillage, tower fill, water piping, steam piping, drain piping, refrigerant piping, refrigerant coils, boiler sections, burners, boiler refractory, disconnect switches, circuit breakers, wiring, steam/air side corrosion or erosion, water/brine side erosion and corrosion of tubes, acid cleaning or damage beyond Gardiner Service Company DBA Gardiner's control. If equipment is no longer repairable or parts are obsolete, we will make an adjustment as to what it would cost to repair the new style piece of equipment that is the replacement, and deduct repair cost from the cost to install that new part.

3) Any service calls which do not reveal a problem for which Gardiner is liable or which City of Lakewood personnel should handle (i.e., setting of thermostats), will be billed at prevailing rates.

4) Gardiner shall not be liable for repairs or replacements due to negligence misuse of equipment.

5) City of Lakewood shall be considered priority customer, Gardiner will respond to a service call as soon as possible.

6) Any services or materials supplied outside the context of this contract will be billed at best prevailing rate.

7) It shall be the responsibility of Gardiner to inspect and report to the Customer any malfunctions and defects within thirty (30) days after effective date of the Agreement. If equipment cannot be operated within this 30 day period due to seasonal conditions or other factors beyond our control, the period for initial inspection will be extended to 30 days after the equipment can be operated and checked, if applicable.

8) It shall also be the responsibility of Gardiner to make recommendations and to assist the Customer in restoring the equipment to proper operating condition. However, all of the actual restoration costs shall be paid by the Customer, if applicable.

9) After equipment restoration to original operating conditions has been approved by Gardiner, coverage will become effective in accordance with the terms of this agreement, if applicable.

10) Hazardous Material – Any removal of hazardous material is the responsibility of the customer. If a material becomes listed as hazardous by the EPA, it will be the responsibility of the customer to remove before service can be performed.

11) For emergency service performed at the customer's request during other than normal working hours, the customer agrees to pay the difference between the prevailing standard billing rate and the prevailing overtime billing rate.

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SUPPLEMENTAL TERMS AND CONDITIONS

(For "All Inclusive" or "Select Maintenance" contract on existing equipment)

12) Gardiner specifically excludes the financial responsibility for the following:

a. Replacement of refrigerant caused by leaks, lost charge, or contamination.

b. Cost associated with any United States government state, county, or city regulations affecting the use of Refrigerants. Gardiner will not take responsibility for cost related to any requirements by any government involving the following:

- Retrofitting of equipment for alternate refrigerants,
- Retrofitting of equipment to improve refrigerant conservation or to prevent leaks or indicate that leaks exist, and
- Any recommendations or accessory provided by the equipment manufacturer or vendor sources to upgrade the equipment to perform in compliance with government regulations or to comply with conservation requirements.

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MMA PRICE SCHEDULE

Contract #MMA7553 - Index #MMA632

1. REPAIR SERVICES

   Gardiner will service all brands of heating, ventilating, and air conditioning (HVAC) equipment and related building controls.

   a. Labor Rates will be charged as follows:

TYPE OF SERVICE	MMA RATE/HR.	TRAVEL CHARGE
HVAC - CHILLER SERVICE	$100.00	$45.00 Per Day
HVAC - CONTROL SERVICE	$100.00	45.00 Per Day
HVAC - RTU SERVICE > 50 TON	$95.00	45.00 Per Day
HVAC - MECHANICAL SERVICE	$88.00	45.00 Per Day
HVAC – SERVICE COORDINATON	$88.00	

The above rates apply to normal working hours (M – F, 7:30a – 5:00p)
Overtime and Saturday labor rates are time and a half, Sundays and Holidays are double time.

   b. Gardiner can provide service on HVAC equipment listed below—**but not limited** to:

YORK	JOHNSON CONTROLS	CLEAVER BROOKS	MULTISTACK
CARRIER	MCQUAY	MARLEY	VALENT
REZNOR	LENNOX	HONEYWELL	DAIKIN
BALTIMORE AIR COIL	LOCHINVAR	AAON	POOLPAK
INVENSIS	RAYPACK	RBI	INNOVENT
TRANE	LIEBERT	BRYAN BOILERS	CAMUS
YASKOWA - VFD	MITSUBISHI	POWERFLAME	SIEMENS CONTROLS
BUILDING LGX -TRIDIUM	JOHNSON – ARS	SUPERIOR	

2. REPLACEMENT SERVICES

   Gardiner will provide replacement services for any brand of heating, ventilating, and air conditioning (HVAC) equipment, related building controls, as well as lighting fixtures and systems.

TYPE OF SERVICE	MMA RATE/HR.	TRAVEL CHARGE
HVAC - MECHANICAL SERVICE	$90.00	n/a
HVAC – CONTROLS PROGRAMMER	$98.00	n/a
ELECTRICAL - LIGHTING	$88.00	n/a
ELECTRICAL – POWER & CONTRL	$95.00	n/a
PROJECT ENGINEERING	$98.00	n/a
PROJECT MANAGEMENT	$98.00	n/a

The above rates apply to normal working hours (M – F, 7:30a – 5:00p)
Overtime and Saturday labor rates are time and a half, Sundays and Holidays are double time.

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MMA PRICE SCHEDULE

3. PREVENTIVE MAINTENANCE SERVICES

Gardiner will provide preventive maintenance agreements on any brand of HVAC equipment and most building control systems.

PM ONLY SERVICE AGREEMENTS – Gardiner will provide a fixed-cost, annual agreement for labor and supplies to perform scheduled preventive maintenance. Travel charges do not apply on preventive maintenance. Any approved repairs or emergency service will be billed under Repair Services. Response time will be four (4) hours.

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EQUIPMENT LIST

	CITY HALL				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
1	Water Cooled Screw Chiller	York YRCTCTCT	SMTM-128940		ROT-100 CDS-100
1	Cooling Tower	Marley UNK	22842-P04P-200		CLT-100
2	Chilled Water Pumps	Paco Unk Weinman 2K2A	Unk J37900	Unk Boiler Rm	PMP-200
1	Condenser Water Pump	Paco UNK	Unk		PMP-200
4	Air Handlers	Buffalo PCBH272 Buffalo PCB183A	58J15059 58J15060 58J15061 58J15062	West 2ndFlr West 1st Flr Police Auditorium	AHU-100 FLR-100
3	Computer Room Units	Leibert BU042AASM EMI CHP240 Stulz Air UNK	316905001 UNK UNK	Pol Comm Rm Tele Eq Room Serv Rm Flr2	CRU-100 FLR-100 CDS-200
2	Rooftop Units	Carrier 48HJE09500 Carrier 48TFF012611	0993G28015 4902G0597	Police Trng Rm Basement Office	RTU-100 FLR-100 CDS-200
1	Controls	JCI 58-287-C7			CNT-100
2	Steam Boilers	Kewanee LW879 Kewanee LW879	K6930 K6031	Boiler Room #2 Boiler Room #1	BLR-200
1	Domestic HW Boiler	Lochinvar CWN3999PM	G07H00199802	Boiler Room	BLR-100
1	Exhaust Fan	McQuay P300	100-30-0377	Pistol Range	FAN-200

	SERVICE GARAGE	(Behind City Hall)			
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
2	Split System Air Cooled Condensing Units	Armstrong SCU10A60A	8496A15825 8496C32771		CDU-200 CDS-200
2	Split System Air Handler	Armstrong GCJ1500020	8495C16815 8496H13678		AHU-100 FLR-100
3	Rooftop Units	Trane 4YCC3024B10 Trane YSC060E3RM Carrier 48TFE006501	13371HTJ9H 114111384L 2201G24462		RTU-100 FLR-100 CDS-200
1	Unit Heater	Trane GPND040AAD	A94M54026		UNH-100

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EQUIPMENT LIST

	FIRE STATION #1				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
1	Hot Water Boiler	Parker T490	43064		BLR-100
2	Air Handlers	Trane MCCA014BBD	K93F43817	ACU-1	AHU-100
		Trane TWV018B140	h24365224	ACU-2	FLR-100
2	Air Cooled	Trane TTA240B300	Unk	CU-1	CDU-200
	Condensing Units	Trane TTR012C100	H25218123	CU-2	CDS-200
14	Exhaust Fan	Unk	Unk		FAN-200
1	Rooftop Unit	Trane TCD180B30C	H27142869D	ACU-3	RTU-100
					FLR-100
					CDS-200
9	Hot Water Heater	Trane UHSA060S8C	D93D06126		MSC-170
			D93D06127		
			D93D06130		
		Unk	UNK 4-9		
2	Furnaces	Trane FFHA003FRA	S93E24193		MSC-150
			S93E24194		
2	Hot Water Pumps	Taco 1619C3N3	Unk		PMP-200
		Unk			
2	Make Up Air Units	Trane GRNC070CE2	A93E07409	MUAU-1	MUA-100
		Trane GRNC015CD2	A93E09410	MAUA-2	FLR-100
3	Radiant Heaters	Jenn CTH2-150	Unk 1-3	Garage	MSC-200
1	Tracer	Trane EMTF000AAB02100	E93F01310		CNT-100
12	VAV Boxes	Trane VFPE 06B	R93F47698-01	1-4	VAV-100
		Trane VFPE 11B	R93F47702-06	5-9	
		Trane VFPE 17D	R93F47707-09	10-12	

	FIRE STATION #2				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
1	Hot Water Boiler	Weil Mclain EG-65-PI	199744		BLR-100
2	Split Systems	Trane TAM4A0A30G	1330264EAV	Up	AHU-100
	Air Handlers	Trane GAM2A0C48S	13493TV2AV	Down	FLR-100
2	Split System	Trane 4TTB3048D1	13402LS03F	Down	CDU-200
	Air Cooled	Trane $TTB3060D1	14082XYM5F	Up	CDS-200
	Condensing Units				
1	Exhaust Fan	Greenheck CSP-152	6456		FAN-200
1	Unit Heater	Reznor UDAP100	BJJ79Y2N6658X		UNH-100
2	Fan Coil	Sterling HS-96S	HS7937		FCU-100
			HS7991		
2	Hot Water Pumps	UNK	1-2		PMP-200

	FIRE STATION #3				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
1	Rooftop Units	Trane YSC092A3	71610214L		RTU-100
					FLR-100
					CDS-200

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EQUIPMENT LIST

	WWTP				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
1	Rooftop Unit	Trane 4TCC3024A1	13194KAT9H	Operations	RTU-100 FLR-100 CDS-200
2	Split System	Trane TWE024C140 Trane TTP018C100 York CS113MFCLP-Y York H1CA150A46A	R134SKG1V P035YDEFF 82-612033H1 NHMM007017	Comp Room Comp Room Operations Operations	SPL-100 FLR-100 CDS-200
2	Air Handlers	Trane MCCA006GAR York C217SHFCLP-Y	K97M41047A 82-612031H1	Digeter Bldg Screening Bldg	AHU-100 FLR-100
8	Exhaust Fans	Unk – 1A Unk – 2A Unk (6)		Digester Bldg Digester Bldg Screening Bldg	FAN-200
1	Air Compressor	Speedaire Unk			ACP-100
1	Air Dryer	Unk			ADR-100
1	Programmable Controller	Trane MP581			CNT-100

	ANIMAL SHELTER				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
2	Split Systems	Lennox Unk Trane TAM4A0A24S	Unk 11463YTEAV		SPL-100 FLR-100 CDS-200

	LAKEWOOD PARK	WOMEN'S CLUB PAVILION			
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
1	Hot Water Boiler	Crown Aruba 7659			BLR-100
1	Hot Water Pump	Armstrong Unk			PMP-100
1	Air Handler	Trane MCCA017BAD0A	K93E28972		AHU-100 FLR-100
1	Air Cooled Condensing Unit	Trane RAUCC20GBG00	J93C80703		CDU-200 CDS-200
2	Unit Heaters	Trane UNK			UNH-100
2	Radiant Heaters	Unk			MSC-200

	MUNICIPAL UTILITIES GARAGE (MUG)				
QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
2	Rooftop Units	Trane YCD150B4 Trane YCD060E4	J33142634D 134811404L		RTU-100 FLR-100 CDS-200

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EQUIPMENT LIST

SENIOR CENTER - DIVISION OF AGING

QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
7	Split Systems	York TG9S080C1	W0H8178444	Basement Conf.	SPL-100
		York TG9S080C1	W0H817420	Basement Storage	FLR-100
		York TG8S080C1	W0E18883429	Maintenance Off.	CDS-200
		York TG9S040A0	W0H8207119	Apt 4 Upstairs	
		York TG9S040A0	W0H8203096	Apt3 Upstairs	
		York TG9S040A0	W0H8203095	Apt2 Upstairs	
		York TG9S040A0	W0H8207118	Apt 1 Upstairs	
2	Rooftop Units	Trane YSC092F3	124710879L	Lower Roof	RTU-100
		Carrier 4TME004-A-501	2107G0237	Lower Roof	FLR-100
					CDS-200
1	Make Up Air Unit	Reznor RPBL800-8-S-MV	3BHJ743NF11	Lower Roof	MUA-100
					FLR-100
					CDS-200

CITY HALL ANNEX

QTY	EQUIPMENT	MAKE/MODEL	SERIAL #	TAG	SCHEDULE
2	Rooftop Units	Trane YCD090D3	J06142399D		RTU-100
		Trane YCD090D3	J08143219D		FLR-100
					CDS-200

Water Treatment Coverage at City Hall, Fire Station #1 and Fire Station #2

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| AIR COMPRESSORS | ACP-100

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the unit.
- ❑ Verify smooth operation of the compressor(s).
- ❑ Verify the operation of the automatic blow-down valve, if applicable.
- ❑ Verify clean air filter.
- ❑ Observe run time and off time.
- ❑ Verify the operation of the unloaders, if applicable.
- ❑ Verify proper oil level, if applicable.
- ❑ Provide a written report of completed work and indicate and uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| AIR DRIERS | ADR-100

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Verify clean condenser coil and fan.
- ❑ Check the pressure drop across the external air filter and drier if taps or gauges are available.
- ❑ Verify the operation of the refrigeration circuit.
- ❑ Cleanup unit and work area.
- ❑ Provide a written report of completed work and indicate and uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| AHU-100 | AIR HANDLING UNIT

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Inspect the unit for cleanliness.
- ❑ Inspect the fan wheel and shaft for wear and clearance.
- ❑ Check the sheaves and pulleys for wear and alignment.
- ❑ Check the belts for tension, wear, cracks, and glazing.
- ❑ Verify tight bolts, set screws, and locking collars.
- ❑ Check dampers for wear, security and linkage adjustment.
- ❑ Verify clean condensate pan.
- ❑ Verify proper operation of the condensate drain.
- ❑ Verify clean air filters.
- ❑ Verify clean coils.
- ❑ Verify smooth fan operation.
- ❑ Cleanup unit and work area.

Lubrication

- ❑ Lubricate the fan shaft bearings, if applicable.
- ❑ Lubricate the motor bearings, if applicable.

Controls and Safeties

- ❑ Verify setting of the low temperature safety device, if applicable.
- ❑ Test the operation of the high static pressure safety device, if applicable.
- ❑ Visually inspect electric heaters, if applicable.
- ❑ Check the step controller, if applicable.
- ❑ Check and record supply air and control air pressure, if applicable.
- ❑ Verify the operation of the control system and dampers while the fan is operating

Motor and Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect the wiring and connections for tightness and signs of overheating and discoloration. This includes wiring to the electric heat, if applicable
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactors for free and smooth operation.
- ❑ Meg the motor and record readings.

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Level Three – Select Maintenance Three-Year Program| AHU-100 | AIR HANDLING UNIT

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the fan.
- ❑ Verify smooth fan operation.
- ❑ Check and record supply and control air pressure, if applicable.
- ❑ Check the belts for tension, wear, cracks and glazing.
- ❑ Verify proper operation of the motor and starter.
- ❑ Verify the operation of the control system.
- ❑ Verify clean air filters.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate uncorrected deficiencies detected.

RUNNING INSPECTION HEATING

- ❑ Report in with the customers' representative.
- ❑ Perform heating inspection/maintenance procedure applicable to the unit (steam/hot water, gas, electric).
- ❑ Verify smooth operation of the fans.
- ❑ Check the belts for tension, wear, cracks, and glazing.
- ❑ Verify clean air filters.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected efficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| BLR-100| BOILER (HOT WATER)

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Open the fire side for cleaning and inspection.
- ❑ Check the heating surfaces for corrosion, pitting, scale, blisters, bulges and soot.
- ❑ Inspect the refractory.
- ❑ Check the expansion tank and drain if needed.
- ❑ Clean the fire inspection glass, if applicable.
- ❑ Check and test boiler blow-down valve.
- ❑ Check the gas train isolation valves for leaks.
- ❑ Check the gas supply piping for leaks.
- ❑ Check the pilot solenoid valve for proper operation and leaks.
- ❑ Check the main gas and the pilot gas regulators for proper operation and leaks.
- ❑ Test the low gas pressure switch. Calibrate and record setting, if applicable.
- ❑ Test the high gas pressure switch. Calibrate and record setting, if applicable.
- ❑ Verify the operation of the burner fan air flow switch, if applicable.
- ❑ Inspect and clean the burner assembly.
- ❑ Inspect and clean the pilot igniter assembly.
- ❑ Inspect and clean the burner fan wheel and all dampers.
- ❑ Run the fan and check for vibration.
- ❑ Inspect the flue and flue damper.
- ❑ Burner Control Panel:
  - o Inspect the panel for cleanliness.
  - o Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Clean burner fan wheel and air dampers.
- ❑ Verify tightness of the linkage set screws and lubricate ball joints.
- ❑ Check the gas valves against leakage (where test cocks are provided).
- ❑ Change fuel oil filters, if applicable
- ❑ Cleanup unit and work area.

Controls And Safeties

- ❑ Clean contacts in program timer, if applicable.
- ❑ Check the operation of the low water cutoff safety device and feed controls.
- ❑ Verify the setting and test the operation of the operating and limit controls.
- ❑ Verify the operation of the water level control.
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| BLR-100| BOILER (HOT WATER)

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the unit.
- ❑ Inspect the burner.
- ❑ Adjust the burner controls to obtain proper combustion.
- ❑ Check the operation of the pressure relief valve.
- ❑ Check the operation of the low water cutoff and feed controls.
- ❑ Check the setting and test the operation of the operating and limit controls.
- ❑ Check the operation of the modulating motor.
- ❑ Blow down low water cutoff if applicable.
- ❑ Check and test boiler blow down valve.
- ❑ Log operating conditions after the system has stabilized.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| BLR-200 |BOILER (STEAM)

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Open the fire side for cleaning and inspection.
- ❑ Check heating surfaces for corrosion, pitting, scale, blisters, bulges, and soot.
- ❑ Inspect refractory.
- ❑ Clean fire inspection glass, if applicable
- ❑ Check blow-down valve packing, and lubricate.
- ❑ Check and test boiler blow-down valve.
- ❑ Verify proper operation of the level float.
- ❑ Verify proper operation of the feed water pump.
- ❑ Verify proper operation of the feed water treating equipment, if treatment is included as part of the Service Agreement.
- ❑ Check the gas train isolation valves for leaks.
- ❑ Check the gas supply piping for leaks.
- ❑ Check the pilot solenoid valve for proper operation and leaks.
- ❑ Check the main gas and the pilot gas regulators for proper operation and leaks.
- ❑ Test the low gas pressure switch. Calibrate and record setting, if applicable.
- ❑ Test the high gas pressure switch. Calibrate and record setting, if applicable.
- ❑ Verify the operation of the burner fan air flow switch, if applicable.
- ❑ Inspect and clean the burner assembly.
- ❑ Inspect and clean the pilot igniter assembly.
- ❑ Inspect and clean the burner fan wheel and all dampers.
- ❑ Run the fan and check for vibration.
- ❑ Inspect the flue and flue damper.
- ❑ Burner Control Panel:
  - o Inspect the panel for cleanliness.
  - o Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Clean burner fan wheel and air dampers.
- ❑ Check the fan for vibration.
- ❑ Verify tightness of the linkage set screws and lubricate ball joints.
- ❑ Check the gas valves against leakage (where test cocks are provided).
- ❑ Change fuel oil filters, if applicable.
- ❑ Cleanup unit and work area.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| BLR-200 |BOILER (STEAM)

Controls And Safeties

- ❑ Clean contacts in program timer, if applicable.
- ❑ Check the operation of the low water cutoff safety device and feed controls.
- ❑ Verify the setting and test the operation of the operating and limit controls.
- ❑ Verify the operation of the water level control.
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.
- ❑

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the unit.
- ❑ Inspect the burner.
- ❑ Adjust the burner controls to obtain proper combustion.
- ❑ Check the operation of the pressure relief valve.
- ❑ Check the operation of the low water cutoff and feed controls.
- ❑ Check the setting and test the operation of the operating and limit controls.
- ❑ Check the operation of the modulating motor.
- ❑ Blow down and try gauge cocks to confirm glass water level.
- ❑ Check and test boiler blow down valve.
- ❑ Log operating conditions after the system has stabilized.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| CRU-100 |COMPUTER ROOM UNIT

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Visually inspect for leaks and report the results.
- ❑ Repair minor leaks as required (e.g. valve packing, flare nuts).
- ❑ Visually inspect the condenser for cleanliness.
- ❑ Inspect pulleys and sheaves for wear and alignment.
- ❑ Check belts for tension, wear, cracks, and glazing.
- ❑ Verify clean evaporator coil, fan wheels, and condensate pan.
- ❑ Clean and flush the condensate drain.
- ❑ Verify clean air filters.
- ❑ Clean the humidifier.
- ❑ Verify proper operation of the humidifier.
- ❑ Verify proper operation of the heating system (re-heat).
- ❑ Check condenser fans for cracks, if applicable.
- ❑ Cleanup unit and work area.

Controls And Safeties

- ❑ Inspect the control panel for cleanliness.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Verify the working condition of all indicator/alarm lights.
- ❑ Test the low evaporator pressure safety device. Calibrate and record setting, if applicable.
- ❑ Test the high condenser pressure safety device. Calibrate and record setting, if applicable.
- ❑ Verify proper operation of the temperature controls.
- ❑ Verify proper operation of the humidity controls.

Lubrication

- ❑ Check the oil level in the compressor, if applicable.
- ❑ Test the oil for acid content and discoloration. Make recommendations to the customer based on the results of the test.
- ❑ Verify the operation of the oil heater, if applicable. Measure amps and compare the readings with the watt rating of the heater.
- ❑ Lubricate the fan bearings as required.
- ❑ Lubricate the motor bearings as required, if applicable.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| CRU-100 |COMPUTER ROOM UNIT

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactors for free and smooth operation.
- ❑ Check the tightness of the motor terminal connections.
- ❑ Meg the compressor motor(s) and record readings.
- ❑ Verify the operation of the electrical interlocks.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Verify the operation of the oil heater, if applicable.
- ❑ Verify clean air filters.
- ❑ Verify smooth operation of the compressor and fans.
- ❑ Verify the starter operation, amperage, and voltage.
- ❑ Verify the operation of the humidifier, if applicable.
- ❑ Verify the operation of the heating system.
- ❑ Check the setpoint and sensitivity of the temperature and humidity control device.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| CDU-200 | CONDENSING UNIT, A-C

RUNNING INSPECTION

- ❑ Report in with the customers' representative
- ❑ Check the general condition of the unit.
- ❑ Log the operating temperatures, pressures, voltages, and amperages.
- ❑ Check the operation of the control circuit.
- ❑ Check the operation of the lubrication circuit.
- ❑ Check the operation of the motor and starter.
- ❑ Analyze the recorded data.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program|CNT-100 |PROGRAMMABLE CONTROLLER

RUNNING INSPECTIONS

- ❑ Report in with the Customer Representative.
- ❑ Review customer logs with the customer for operational problems and trends.
- ❑ Make a back-up copy of the program, if applicable.
- ❑ Check for loose or damaged parts or wiring.
- ❑ Check for any accumulation of dirt or moisture. Clean if required.
- ❑ Verify proper grounding.
- ❑ Inspect interconnecting cables and electrical connections.
- ❑ Verify power supply for proper voltage.
- ❑ Verify proper communication link operation between the control panel and the external ICS devices, if applicable.
- ❑ Verify that equipment is being controlled at the appropriate values
- ❑ Change one set point value, verify smooth transition and stable control at the new set point.
- ❑ Return set point to original value
- ❑ Repeat for each additional control loop.
- ❑ Verify that controlled values and dampers will stroke fully in both directions, sealing tightly where appropriate.
- ❑ Verify the proper operation of critical control processes and points associated with this unit. Make adjustments if necessary.
- ❑ Verify the correct time and date, if applicable.
- ❑ Check modem operation, if applicable.
- ❑ Clean the external surfaces of the panel enclosure.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| CLT-100 |COOLING TOWER

COMPREHENSIVE ANNUAL INSPECTION

General Assembly - STRUCTURE

- ❑ Report in with the customers' representative.
- ❑ Disassemble all screens and access panels for inspection.
- ❑ Inspect the conditions of the slats, if applicable.
- ❑ Inspect the condition of the tower fill.
- ❑ Inspect the condition of the support structure.
- ❑ Inspect the condition of the basins (upper and lower) and/or spray nozzles.
- ❑ Verify clean basins and strainer(s).
- ❑ Verify the condition and operation of the basin fill valve system and clean probes.

General Assembly - MECHANICAL

- ❑ Inspect belts for wear, cracks, and glazing.
- ❑ Verify correct belt tension. Adjust the tension as necessary.
- ❑ Inspect sheaves and pulleys for wear, condition, and alignment.
- ❑ Inspect fan shaft and bearings for condition.
- ❑ Inspect fan assembly for condition, security, and clearances. (e.g. blade tip clearance).
- ❑ Inspect gear box for leaks, if applicable.
- ❑ Inspect drive and coupling for condition and security, if applicable.

Lubrication System

- ❑ Lubricate motor bearings.
- ❑ Lubricate fan shaft bearings.
- ❑ Check gear box oil level and add or change per manufactures recommendation.

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactor(s) for free and smooth operation.
- ❑ Meg the motor(s) and record readings.
- ❑ Check disconnect terminal block for wear, tightness and signs of overheating and discoloration.
- ❑ Check the condition and operation of the basin heater contactor(s).
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| CLT-100 |COOLING TOWER

STARTUP PROCEDURE

- ❑ Report in with the customers' representative.
- ❑ Fill the basin and verify the float level.
- ❑ Verify the operation of the basin heaters
- ❑ Verify the operation, setpoint, and sensitivity of the basin heater temperature control device.
- ❑ Start the condenser water pumps.
- ❑ Verify the balance of the return water through the distribution boxes.
- ❑ Verify proper operation of the bypass valve(s), if applicable.
- ❑ Operate fan and verify smooth operation.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general operation of the tower.
- ❑ Verify clean basins and strainers (upper and lower) and/or spray nozzles.
- ❑ Verify proper water level in the basin.
- ❑ Verify proper operation of the water level control device.
- ❑ Verify smooth operation of the fan(s).
- ❑ Verify proper operation of the bypass valve(s), if applicable.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

SHUTDOWN PROCEDURE

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the tower.
- ❑ Turn off electrical power to basin heaters, tower fans, and pipe heaters as necessary.
- ❑ Drain tower and condenser water piping.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program | FAN-200 | FANS

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Check unit for cleanliness.
- ❑ Check sheaves and pulleys for wear and alignment.
- ❑ Check belts for tension, wear, cracks, and glazing.
- ❑ Verify tight bolts, set screws, and locking collars.
- ❑ Check Inlet Guide Vanes (IGV) for wear and security, if applicable.
- ❑ Verify proper blade clearance.
- ❑ Verify proper operation of the IGVs, if applicable.
- ❑ Verify the operation of the control system while the fan is operating.
- ❑ Cleanup unit and work area.

Lubrication

- ❑ Lubricate fan shaft bearings.
- ❑ Lubricate motor bearings, if applicable.

Controls And Safeties

- ❑ Test the operation of the high static pressure safety device, if applicable.
- ❑ Calibrate and record reading.

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect the wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactor for free and smooth operation.
- ❑ Meg the motor and record readings.
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the fan.
- ❑ Verify smooth operation of the fan.
- ❑ Verify the operation of the control system.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program |FCU-100 • FAN COIL UNIT

RUNNING INSPECTION

- ❑ Report in with the customer Representative.
- ❑ Record and report abnormal conditions.
- ❑ Verify clean water coil.
- ❑ Verify tightness of fan set screws
- ❑ Verify smooth fan operation.
- ❑ Verify clean condensate pan.
- ❑ Verify the operation of the condensate pump, if applicable.
- ❑ Verify proper operation of the temperature control device.
- ❑ Cleanup unit and work area.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program | MSC-170 |GAS HOT WATER HEATER

RUNNING INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the unit.
- ❑ Check for water and fuel leaks
- ❑ Inspect the flue for holes and/or stoppage.
- ❑ Verify clean burner assembly.
- ❑ Verify proper combustion air to the burner.
- ❑ Verify proper draft.
- ❑ Verify proper operation of the temperature control device
- ❑ Verify operating procedures with operating personnel.
- ❑ Cleanup unit and work area.
- ❑ Provide a written report of completed work, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| ROT-100 |HELI-ROTOR CHILLER, W-C

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Leak-test the chiller and report the leak check results.
- ❑ Repair minor leaks as required (e.g. valve packing, flare nuts).
- ❑ Replace the refrigerant filter/drier and strainers, if required
- ❑ Visually inspect condenser tubes for cleanliness.
- ❑ Cleanup unit and work area.

Controls And Safeties

- ❑ Inspect the control panel for cleanliness.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Verify all settings in the electronic control panel.
- ❑ Test the low oil pressure safety device. Calibrate and record setting. .
- ❑ Test the operation of the optical oil sensor (RTHC only)
- ❑ Check and test the operation of the chilled water and condenser water interlocks.

Lubrication System

- ❑ Check for leaking shaft seal, if applicable
- ❑ Check oil for discoloration.
- ❑ Change the oil filter.
- ❑ Verify the operation of the oil heater. Measure amps and volts and compare the readings with the watt rating of the heater.

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Grease motor bearings, if applicable. Use York approved grease.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check tightness of motor terminal connections.
- ❑ Check condition of the contacts for wear and pitting.
- ❑ Check contactors for free and smooth operation.
- ❑ Check the mechanical linkages for wear, security and clearances.
- ❑ Meg the motor and record the readings.
- ❑ Verify the operation of the electrical interlocks.
- ❑ Measure voltage and record.
- ❑ Check the alignment on open drive motors, if applicable.
- ❑ Check coupling, if applicable.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| ROT-100 |HELI-ROTOR CHILLER, W-C

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the unit.
- ❑ Log the operating temperatures, pressures, voltages, and amperages.
- ❑ Check the operation of the control circuit.
- ❑ Check the operation of the lubrication system.
- ❑ Check the operation of the motor and starter.
- ❑ Analyze the recorded data.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| MUA-100 | MAKE-UP AIR UNIT

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Verify tight bolts, set screws, and locking collars.
- ❑ Verify tightness of the fan, fan guards, louvers, etc.
- ❑ Check sheaves and pulleys for wear and alignment, if applicable.
- ❑ Check belts for tension, wear, cracks, and/or glazing.
- ❑ Inspect dampers for wear, security, and clearances, if applicable.
- ❑ Verify clean burner assembly.
- ❑ Verify clean air filters.
- ❑ Cleanup unit and work area.

Lubrication

- ❑ Lubricate fan bearings as necessary, if applicable.
- ❑ Lubricate motor bearings, if applicable.
- ❑ Lubricate damper bearings, if applicable.

Controls And Safeties

- ❑ Verify the setting of the low temperature safety device.
- ❑ Verify the operation of the pre-heat control device, if applicable.
- ❑ Verify the operation of the cooling control device, if applicable.
- ❑ Verify the operation of the re-heat control device, if applicable.
- ❑ Verify the operation of the humidity control device, if applicable.
- ❑ Verify the operation of the control system while the fan is operating.
- ❑ Verify the operation of the fan switch, if applicable.
- ❑ Verify the operation of the pilot safety device, if applicable.

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect the wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactors for free and smooth operation.
- ❑ Meg the motor and record readings.
- ❑ Check volts and amps of the motor.
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| MUA-100 | MAKE-UP AIR UNIT

COMPREHENSIVE ANNUAL INSPECTION-HEATING

- ❑ Report in with the customers' representative.
- ❑ Perform heating inspection/maintenance applicable to the unit (gas, electric, steam/hot water).
  - ❑ Gas Heat Option-HTG1
  - ❑ Electric Heat Option-HTG2
  - ❑ Hot Water / Steam Heat Option-HTG3
- ❑ Verify smooth operation of the fans.
- ❑ Check the belts for tension, wear, cracks, and glazing.
- ❑ Verify clean air filters.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the fan.
- ❑ Verify the operation of the control system.
- ❑ Verify clean air filters.
- ❑ Verify proper combustion air to the burner.
- ❑ Verify proper gas pressure to the burner.
- ❑ Check the flame for proper combustion.
- ❑ Review operating procedures with operating personnel.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program |PMP-100 |PUMPS

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Check motor shaft and pump shaft for alignment, if applicable.
- ❑ Inspect the coupling for wear.
- ❑ Verify that the shaft guard is in place and tight, if applicable.
- ❑ Verify water flow through the pump.
- ❑ Check for leaks on the mechanical pump seals, if applicable.
- ❑ Verify proper drip rate on the pump seal packing, if applicable.
- ❑ Check sheaves and pulleys for wear and alignment, if applicable
- ❑ Inspect belts for tension, wear, cracks, and glazing, if applicable
- ❑ Cleanup unit and work area.

Lubrication

- ❑ Lubricate the motor bearings as necessary.
- ❑ Lubricate the pump bearings as necessary.

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactors for free and smooth operation.
- ❑ Verify proper volts and amps.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Verify smooth operation of the pump.
- ❑ Check for leaks on pump seal.
- ❑ Verify proper drip rate on the pump seal packing, if applicable.
- ❑ Lubricate the motor and pump bearings as necessary, if applicable.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| PMP-200 |IN-LINE CIRCULATING PUMP

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Verify smooth operation of the pump.
- ❑ Check for leaks on pump seal.
- ❑ Verify proper drip rate on the pump seal packing, if applicable.
- ❑ Lubricate the motor and pump bearings as necessary, if applicable.
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program | | **MSC-150 | FURNACE**

RUNNING INSPECTION

- ❑ Report in with the client's representative
- ❑ Visually inspect the heat exchanger.
- ❑ Inspect the combustion air blower fan, and clean, if required.
- ❑ Lubricate the combustion air blower fan motor, if applicable.
- ❑ Lubricate the blower fan motor, if applicable.
- ❑ Verify the operation of the combustion air flow-proving device.
- ❑ Verify the operation of the flame detection device.
- ❑ Verify the integrity of the flue system.
- ❑ Verify the operation of the operating controls.
- ❑ Verify the burner sequence of operation.
- ❑ Verify proper gas pressure to the unit and/or at the manifold, if applicable.
- ❑ Cleanup unit and work area
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| MSC-200 | RADIANT HEATING UNITS

RUNNING INSPECTION

General Assembly

- ❑ Report in with the customers' representative
- ❑ Check the general condition of the unit.
- ❑ Verify tightness of the fan, fan guards, louvers, etc.
- ❑ Inspect the flue for holes and/or stoppage. If applicable.
- ❑ Verify clean burner assembly. If applicable.
- ❑ Check sheaves and pulleys for wear and alignment, if applicable.
- ❑ Check belts for tension, wear, cracks, and/or glazing.
- ❑ Verify the integrity of the heat exchanger. If applicable.
- ❑ Verify operating procedures with the operating personnel.
- ❑ Cleanup unit and work area.

Lubrication

- ❑ Lubricate the fan motor, if applicable.
- ❑ Lubricate the fan bearings as necessary.

Controls And Safeties

- ❑ Verify proper operation of the temperature control device.
- ❑ Verify proper operation of the high temperature control device.
- ❑ Verify proper operation of the fan switch.
- ❑ Verify proper operation of the pilot safety device, if applicable.

Electrical

- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Provide a written report of completed work, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| RTU-100 |ROOFTOP UNIT

COMPREHENSIVE ANNUAL INSPECTION-COOLING

General Assembly

- ❑ Report in with the client's representative
- ❑ Visually inspect for leaks and report leak check results
- ❑ Repair minor leaks as required (e g valve packing, flare nuts)
- ❑ Check the sheaves and pulleys for wear and alignment
- ❑ Check the belts for tension, wear, cracks, and/or glazing
- ❑ Verify clean condenser and evaporator
- ❑ Verify clean evaporator fan
- ❑ Verify clean air filters
- ❑ Verify proper damper operation
- ❑ Check mechanical linkages for wear, tightness, and clearances
- ❑ Check the operation and setup of the RTM module, if applicable
- ❑ Check the VFD, if applicable
- ❑ Verify the starter operation
- ❑ Verify smooth operation of the compressors and fans
- ❑ Cleanup unit and work area

Controls And Safeties

- ❑ Verify the operation of the discharge air temperature control device
- ❑ Verify the operation of the mixed air temperature control device
- ❑ Test the operation of the low evaporator pressure safety device Calibrate, if applicable, and record setting
- ❑ Test the operation of the low temperature safety device Calibrate, if applicable and record setting
- ❑ Test the operation of the low oil pressure safety device, if applicable Calibrate, record and verify setting
- ❑ Verify the operation of the static pressure control

Lubrication

- ❑ Lubricate damper bearings, if applicable
- ❑ Lubricate motor bearing, if applicable
- ❑ Lubricate fan bearings
- ❑ Check oil level in the compressor(s), if applicable
- ❑ Check oil for acid content and discoloration Make recommendations to the customer based on the results of the test

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| RTU-100 |ROOFTOP UNIT

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures
- ❑ Clean the starter and cabinet
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration
- ❑ Check the contactors for free and smooth operation
- ❑ Meg the compressor motor(s) and record readings
- ❑ Verify the tightness of the compressor motor terminal connections
- ❑ Verify the operation of the compressor oil heater(s)
- ❑ Provide a written report of completed work and indicate any uncorrected deficiencies detected

MID-SEASON COOLING INSPECTION

- ❑ Report in with the client's representative
- ❑ Check the general condition of the unit
- ❑ Log the operating condition after system has stabilized
- ❑ Verify the operation of the control circuits
- ❑ Analyze the recorded data
- ❑ Review operating procedures with operating personnel
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected

COMPREHENSIVE ANNUAL INSPECTION-GAS HEATING

- ❑ Report in with the client's representative
- ❑ Visually inspect the heat exchanger
- ❑ Inspect the combustion air blower fan, and clean, if required
- ❑ Lubricate the combustion air blower fan motor, if applicable
- ❑ Verify the operation of the combustion air flow-proving device
- ❑ Test the operation of the high gas pressure safety device, if applicable Calibrate, if necessary
- ❑ Test the operation of the low gas pressure safety device, if applicable Calibrate, if necessary
- ❑ Verify the operation of the flame detection device
- ❑ Verify the integrity of the flue system
- ❑ Verify the operation of the operating controls
- ❑ Verify the burner sequence of operation
- ❑ Verify proper gas pressure to the unit and/or at the manifold, if applicable
- ❑ Verify smooth operation of the fans
- ❑ Check the belts for tension, wear, cracks, and glazing
- ❑ Verify clean air filters
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| RTU-100 |ROOFTOP UNIT

MID-SEASON HEATING INSPECTION

- ❑ Report in with the client's representative
- ❑ Verify smooth operation of the fans
- ❑ Check the belts for tension, wear, cracks, and glazing
- ❑ Verify clean air filters
- ❑ Verify proper operation of the heating section
- ❑ Verify the operation of the temperature controls
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| SPL-100 | SPLIT SYSTEM

COMPREHENSIVE ANNUAL INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Visually inspect for leaks and report the results.
- ❑ Repair minor leaks as required (e.g. valve packing, flare nuts).
- ❑ Visually inspect the condenser for cleanliness.
- ❑ Inspect pulleys and sheaves for wear and alignment.
- ❑ Check belts for tension, wear, cracks, and glazing.
- ❑ Verify clean evaporator coil, fan wheels, and condensate pan.
- ❑ Clean and flush the condensate drain.
- ❑ Verify clean air filters.
- ❑ Clean the humidifier.
- ❑ Verify proper operation of the humidifier.
- ❑ Verify proper operation of the heating system (re-heat).
- ❑ Check condenser fans for cracks, if applicable.
- ❑ Cleanup unit and work area.

Controls And Safeties

- ❑ Inspect the control panel for cleanliness.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Verify the working condition of all indicator/alarm lights.
- ❑ Test the low evaporator pressure safety device. Calibrate and record setting, if applicable.
- ❑ Test the high condenser pressure safety device. Calibrate and record setting, if applicable.
- ❑ Verify proper operation of the temperature controls.
- ❑ Verify proper operation of the humidity controls.

Lubrication

- ❑ Check the oil level in the compressor, if applicable.
- ❑ Test the oil for acid content and discoloration. Make recommendations to the customer based on the results of the test.
- ❑ Verify the operation of the oil heater, if applicable. Measure amps and compare the readings with the watt rating of the heater.
- ❑ Lubricate the fan bearings as required.
- ❑ Lubricate the motor bearings as required, if applicable.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| SPL-100 | SPLIT SYSTEM

Motor And Starter

- ❑ Disable starter per lockout/tagout procedures.
- ❑ Clean the starter and cabinet.
- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Check the condition of the contacts for wear and pitting.
- ❑ Check the contactors for free and smooth operation.
- ❑ Check the tightness of the motor terminal connections.
- ❑ Meg the compressor motor(s) and record readings.
- ❑ Verify the operation of the electrical interlocks.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Verify the operation of the oil heater, if applicable.
- ❑ Verify clean air filters.
- ❑ Verify smooth operation of the compressor and fans.
- ❑ Verify the starter operation, amperage, and voltage.
- ❑ Verify the operation of the humidifier, if applicable.
- ❑ Verify the operation of the heating system.
- ❑ Check the setpoint and sensitivity of the temperature and humidity control device.
- ❑ Provide a written report of completed work, operating log, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program| UNH-100 |UNIT HEATER

RUNNING INSPECTION

General Assembly

- ❑ Report in with the customers' representative.
- ❑ Check the general condition of the unit.
- ❑ Verify tightness of the fan, fan guards, louvers, etc.
- ❑ Inspect the flue and heat exchanger for holes and/or stoppage.
- ❑ Verify clean burner assembly.
- ❑ Cleanup unit and work area.
- ❑ Light the pilot and start the unit.
- ❑ Verify proper combustion air to the burner.
- ❑ Verify proper draft.
- ❑ Verify operating procedures with operating personnel.
- ❑ Cleanup unit and work area.

Lubrication

- ❑ Lubricate the fan motor, if applicable.

Controls And Safeties

- ❑ Verify proper operation of the temperature control device.
- ❑ Verify proper operation of the pilot safety device, if applicable.
- ❑ Verify proper operation of the high temperature control device.
- ❑ Verify proper operation of the fan switch.

Electrical

- ❑ Inspect wiring and connections for tightness and signs of overheating and discoloration.
- ❑ Provide a written report of completed work, and indicate any uncorrected deficiencies detected.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program | VAV-100 |VARIABLE AIR VOLUME UNIT

VARITRANE RUNNING INSPECTION

- ❑ Report in with the customers' representative.
- ❑ Record and report abnormal conditions, measurements taken, etc.
- ❑ Review with customer operational problems and trends.
- ❑ Verify proper air valve operation from the zone sensor or EMS system.
- ❑ Verify VAV box sequence of operation.
- ❑ Check and adjust all related controls.
- ❑ Verify clean air filters, if applicable.
- ❑ Cleanup unit and work area.
- ❑ Provide written report of completed work.

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SCHEDULES

Level Three – Select Maintenance Three-Year Program

FLR-100| AIR FILTER INSPECTION

The Service Company will furnish **four** filter inspections during the operating season for the air handling units under this Service Agreement as indicated below:

- ❑ Report in with the client's representative
- ❑ Remove dirty disposable filters
- ❑ Install proper type and size disposable filers per air flow markings
- ❑ Verify spacers are in place if needed
- ❑ Clean filter section of debris
- ❑ Dispose of old filters per Service Agreement
- ❑ Provide written report of completed work

CDS-200 | AIR COOLED CONDENSER COIL CLEANING

The Service Company will clean coils **annually** under this Service Agreement as indicated below:

- ❑ Report in with the client's representative
- ❑ Disable unit per lockout tagout procedures
- ❑ Clean air cooled condenser coils using pressurized water (Opposite path of air)
- ❑ Enable unit
- ❑ Cleanup work area
- ❑ Provide a written report of completed work

CDS-100 | WATER COOLED CONDENSER CLEANING

- ❑ Report in with the customers' representative.
- ❑ Isolate condenser from water loop and cooling tower.
- ❑ Drain and pull easy end head.
- ❑ Brush condenser tubes and flush until clear.
- ❑ Bolt up condenser head and replace gaskets as needed.
- ❑ Open isolation valves to system.
- ❑ Cleanup work area.
- ❑ Provide a written report of completed work.

TKO -Analysis

- ❑ This test, using a refrigerant oil test kit, provides an indication of whether the acid number of the refrigeration oil is safe or unsafe.

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SCOPE OF SERVICE – Water Treatment

Condenser Water – (Cooling tower – open system)

Monthly Inspection

- Check chemicals in feed tank and adjust as required.
- Check dissolved solids contents in water.
- Check pH of water being treated.
- Check bleed rate.
- Check chemical content in system being treated.
- Check conductivity controller operation.
- Adjust chemical feed pump as required.
- Check for algae.
- Maintain chemical feed and control equipment.
- Remove empty chemical drums

Chilled/Hot Water (Closed loop system)

Periodic Inspection- Monthly during operating season

- Check chemical content in system being treated.
- Add chemicals as required, chemical included.
- Remove empty chemical drums

SYSTEM	RECOMMENDED PRODUCT
Condenser Water	C-740
Closed Loop (Chilled)	LG-62
Biocides	AA-315; AA-4015
Boiler Water	LG-65

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